

MGSC 695 - Optimization for Data Science

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Homework Assignment 1

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Problem 1

It is said that we are given data that consists of n observations. Understandably, there will be n predictions, which in turn implies that the matrix representing the outcome (or “target”) variable will have n observations.

This outcome variable matrix is a $(n \times 1)$ matrix written as:

$$y = \begin{pmatrix} y_1 \\ y_2 \\ \vdots \\ y_n \end{pmatrix}$$